FEATURE:				PROJECT:							
	Klamath River Dams Removal				Klamath River						
	Partial Removal Option Copco No. 1 Dam & Powerplant Removal				Oregon						
				WOID:	AF652		ATE LEVEL:	Feasibility			
		Probable		REGION:	: MP	UNIT P	PRICE LEVEL:	Jul-10			
		ycle - 50 Yea	ar	FILE:			Completed Sheets\MP MPL MP	PH\01 - Copco 1\MP\(Copcc			
	Sumn	nary		<u> </u>	1 - MP - Probable	i.xisxji.ire oyo.	e Summary				
PLANT	PAY ITEM		DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT			
	1	1		†		†					
		Periodic Cost	sts - Year 1	1		†		\$95,000.00			
		Periodic Cost	sts - Year 8					\$32,566.50			
		Periodic Cost						\$31,689.00			
		Periodic Cost		† '		1		\$16,380.90			
		Periodic Cost		1				\$16,596.72			
		Periodic Cost		1		†		\$8,239.50			
		Periodic Cost		† 1				0.00			
			s - Maintenance			1		\$525,752.00			
			es gov't service / construction contract	rts)				Ψ020,. 02			
		V	3 901 1 001 1100 1 00	1		+					
		Subtotal 1		 		†		\$726,224.62			
		Mobilizati	ion	5%	+/-			\$36,000.00			
	<u> </u>		with Mobilization			-		\$762,224.62			
			on to Notice to Proceed (NTP), from L	Unit Price Lev	vel (July 2010)	to NTP (Ju	ulv 2020),	\$262,141.38			
			at	1	per year for	120	months.				
		Subtotal 2 = /	Subtotal 1 with Mobilization + Escala		ſ <u>.</u>			\$1,024,366.00			
		 	Contingencies	10%	+/-			\$125,634.00			
		+	Subtotal 2 + Design Contingencies				1	\$1,150,000.00			
			ce for Procurement Strategies (APS)		+/-			İ			
			of solicitation assumed: Competitive	e Request for	L	 					
			Subtotal 3 + APS					\$1,150,000.00			
		CONTRACT		†		 		\$1,150,000.00			
		Construction Contingencies		20%	+/-			\$200,000.00			
	 	FIELD COST		 		 		\$1,350,000.00			
	İ		tract Costs	30%	+/-			\$400,000.00			
	 		mental Cultural / Mitigation ~ 7%,			 	t	 ,			
			ing Design ~ 5%, Maintenance Service	ce Contract ~	- 5%						
			nent ~ 2%, Inspections ~ 10%		5 /6						
			eout ~ 1%)								
		CONSTRUCT						\$1,750,000.00			
		00	1010001				 	Ψ1,1 σο,σου			
	l	Note: intial es	stimate completed 4/17/11, revised no	i 1		design con	tingonoise costs 6/9/1	4			
	[propriate use and terminology, see Re				· · · · · · · · · · · · · · · · · · ·				
	QUANTITIES			Old IT de Co	triudi, which is		RICES	7-02 and 00 00.			
 3Y		****		BY પો.,			CHECKED				
Rick Benil	it		Stephen Latham	*^	Greg Akins		Checker	n 4/9/11			
DATE P		DEU		DATE PRE	· · · · · · · · · · · · · · · · · · ·	K-	PEER REVIEW	DATE ,			
	Пънген	VER	1	UATE PHE	IFANLU (((J	A-CD	6/12/11			
)3/24/11			Tom Hepler P.E. 3/25/11	4(1	[[[]		Nea	4/ [3] 11			

FEATURE:			PROJECT:						
					Klamath Riv	ver			
	Klama	th River Dar	ns Removal	Oregon					
	Partial Removal Option			WOID:	AF652	ESTIMA	TE LEVEL:	Feasibility	
	Copco	No. 1 Dam	& Powerplant Removal	REGION:	MP	UNIT PF	RICE LEVEL:	Jul-10	
Most Probable Life Cycle			FILE: U:\2011 Projects\Klamath\002 Completed Sheets\MP MPL MPH\01 - Copco 1\MP\Cop 1 - MP - Probable.xlsx]Template Sheet 1						
PLANT ACCOUNT	PAY ITEM		DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT	
	1	Furnish, insta	all, and maintain a 7-foot-high chain	86-68130	300	lf	\$60.00	\$18,000.00	
		link fence alo	ng the west side of the powerhouse						
		(assume two	double 12ft wide gates for vehicle a	ccess)					
		(assume repl	ace two times)						
	2	Repaint expo	sed portion of penstocks and	86-68130	8,900	ft2	\$5.00	\$44,500.00	
		(Assume repa							
			assume minor paint repair ~ 2% are	ea					
	3	Remove pain	t on east side of powerhouse	86-68130	1,300	ft2	\$25.00	\$32,500.00	
		(assume pain	t contains heavy metals)		-				
- 111 111111									
								1177	
			LIFE CYCLE SUBTOTAL					\$95,000.00	
		QUAN	ITITIES			PR	IICES		
				BY Quy Au CHECKED 11 of the					
Rick Ben			Stephen Latham PEER REVIEW / DATE	Greg Akins)	()		DEED DEVIEW I DATE	y - 20/13/11	
DATE PREPARED PEER REVIEW / DATE 03/21/11 Tom Hepler P.E. 3/24/11			DATE PREPARED 4/25/K PEER REVIEW / DATE (1) 5			5/13/11			

FEATURE: Klamath River Dams Removal				PROJECT:						
				Klamath River						
	Parti	iai Removai (Option		Oregon					
	Remo	oval Site Ma	iintenance	WOID:	AF484	ESTIM	ATE LEVEL:	Feasibility		
	Most	t Probable		REGION:	: MP	UNIT F	PRICE LEVEL	Jul-10		
	Life (Cycle - 50 Ye	ear	FILE:			Completed Sheets\MP I			
	Oper	ation and M	laintenance - Periodic Costs				le.xlsx]Template Sheet			
PLANT ACCOUNT	PAY ITEM		DESCRIPTION	CODE	QUANTITY	UNIT	UNIT PRICE	AMOUNT		
		City Mainter	- August Oans 4 Olfa anlid				107 000 00	227 222 22		
	1	Site Mannen	nance - Annual: Copco 1 Site only*		1	LS	\$25,000.00	\$25,000.00		
			d per year - threes sites:	86-68130	120	mdy**				
	<u> </u>	3-Man mainte			•					
	<u> </u>	6 Months	active inspection/maintenance	<u>.</u> !						
	<u> </u>	2 Weeks	full time (1 month each spring)			<u> </u>				
		4 Full day	ys, 2 times each month (5 months)]!		T				
		Site main	ntenance required at JC Boyle, Copco 1 & Copco 2	2!		T				
		Estim	nate prorated the time at each dam site based							
	<u> </u>		ercent of total partial removal construction costs							
		Faulipment no	eeded per year	86-68130	40	dy***				
		1-Service truc		00-00100	40	uy	 			
			compressor, welder, generator	+	· · · · · · · · · · · · · · · · · · ·	+				
	\vdash		peneral tools	-		-	+			
			**************************************	-	<u> </u>	 	 			
		† — — — — — — — — — — — — — — — — — — —	prorated the time at each dam site based		 					
		On percen	nt of total partial removal construction costs							
		1	eded per year (percentage of labor	86-68130	15%	<u> </u>	ļ			
		& equipme	ant)							
		Road mainter	nance needed per year (percentage	86-68130	10%			WWW.		
		of labor &	equipment)							
			ted cost for all 3 sites is approximately \$160,000 a	annually:	<u> </u>					
		 	£15% for the Copco 1 site only		L					
		** Man days p	per year for 50 years		<u> </u>					
		***Days per ye	ear for 50 years		<u> </u>					
			SUBTOTAL THIS SHEET					\$25,000.00		
			QUANTITIES			PRI	CES			
3Y				вү	9-8A	(in	CHECKED	A. din		
Rick Be			Stephen Latham		G reg Akins		Mail	Jan-11-11		
DATE PREPARED PEER REVIEW / DATE			PEER REVIEW / DATE	DATE PRE	PARED		PEER REVIEW /	DATE		
04/18/11 Tom Hepler P.E. 4/18/11				TI	52/11		MW	5/12/11		